What is claimed:

1. A control method for an electric power converter that comprises first and second DC power sources, wherein a pole is formed by connecting a positive pole of first DC power source with a negative pole of second DC power source, and voltage is applied to a load by switching between the negative pole of first DC power source and the positive pole of the second DC power source; the method comprising:

determining conductivity of a switch between the positive and negative poles of the first DC power source when the voltage command is lower than the electric potential output by the second DC power source;

determining conductivity of a switch between the positive and negative poles of the second DC power source when the aforementioned voltage command is higher than the electric potential output by the second DC power source; and

switching the pole to be connected to the load in accordance with the aforementioned determining.

2. A control method for an electric power converter described in claim 1, wherein the control method uses two carriers, a first lower carrier and a second upper carrier, further comprising:

setting a lower limit of the lower carrier to the electric potential of the first DC power source's negative pole;

setting an upper limit of the lower carrier and a lower limit of the upper carrier to the electric potential of a pole formed by connecting the positive pole of the first DC power source with the negative pole of the second DC power source; and

setting the upper limit of the upper carrier to the electric potential of the second DC power source's positive pole.

3. A control method for an electric power converter described in claim 1 wherein the lower carrier and the upper carrier are triangular waves.

4. A control method for an electric power converter described in claim 1, further comprising:

generating a power distribution command based on power distribution commands for at least said first and second DC power sources;

generating a voltage command for said power converter; and

generating a voltage command by adding said voltage command to said power distribution command.

5. A control method for an electric power converter that comprises first and second DC power sources, wherein a pole is formed by connecting a positive pole of first DC power source with a negative pole of second DC power source, and voltage is applied to a load by switching between the negative pole of first DC power source and the positive pole of the second DC power source, using two carriers consisting of a lower carrier and a higher carrier; the method comprising:

determining conductivity of a switch between the positive and negative poles of the first DC power source by comparing the voltage command with the lower carrier;

determining conductivity of a switch between the positive and negative poles of the second DC power source by comparing the voltage command with the upper carrier; and

switching the pole to be connected to the load in accordance with the determining.

6. A control method for an electric power converter described in claim 5, further comprising:

setting a lower limit of the lower carrier to the electric potential of the first DC power source's negative pole;

setting an upper limit of the lower carrier and a lower limit of the upper carrier to the electric potential of a pole formed by connecting the positive pole of the first DC power source with the negative pole of the second DC power source; and

setting the upper limit of the upper carrier to the electric potential of the second DC power source's positive pole.

7. A control method for an electric power converter described in claim 5 wherein the lower carrier and the upper carrier are triangular waves.

8. A control method for an electric power converter described in claim 5, further comprising:

generating a power distribution command based on power distribution commands for at least said first and second DC power sources;

generating a voltage command for said power converter; and

generating a voltage command by adding said voltage command to said power distribution command.

9 A control method for an electric power converter having first and second DC power sources, using two carriers consisting of a lower carrier and a higher carrier, wherein a pole is formed by connecting a positive pole of said first DC power source and a negative pole of said second DC power source to a common bus line; a switching element is provided between a negative pole of the first DC power source bus line and an output terminal to provide conductance from the output terminal to a negative pole of the first DC power source bus line; a diode is connected in parallel with the switching element; a switch is provided for selecting bi-directional conductance between the output terminal and the common bus line; a switch is provided for selecting bi-directional conductance between the output terminal and the positive pole of the second DC power source bus line; and voltage is applied to the load by switching the pole to be connected to the load; the method comprising:

determining conductivity of a switch between the positive and negative poles of the first DC power source by comparing the voltage command with the lower carrier;

determining conductivity of a switch between the positive and negative poles of the second DC power source by comparing said voltage command with the upper carrier; and

switching the pole to be connected to the load in accordance with the determining conductivity.

10. A control method for an electric power converter described in claim 9, further comprising:

setting a lower limit of the lower carrier to the electric potential of the first DC power source's negative pole;

setting an upper limit of the lower carrier and a lower limit of the upper carrier to the electric potential of a pole formed by connecting the positive pole of the first DC power source with the negative pole of the second DC power source; and

setting the upper limit of the upper carrier to the electric potential of the second DC power source's positive pole.

11. A control method for an electric power converter described in claim 9 wherein the lower carrier and the upper carrier are triangular waves.

12. A control method for an electric power converter described in claim 9, further comprising:

generating a power distribution command based on power distribution commands for at least said first and second DC power sources;

generating a voltage command for said power converter; and

generating a voltage command by adding said voltage command to said power distribution command.

13. A power converter, comprising:

a first DC power source;

a second DC power source;

a common bus line connected to a positive pole of the first DC power source and to a negative pole of the second DC power source;

a first plurality of semiconductor switches connected between a negative pole of the first DC power source and each of three terminals of a three-phase load;

a second plurality of semiconductor switches connected between the common bus line and each of the three terminals of the three-phase load;

a third plurality of semiconductor switches connected between a positive bus line of the second DC power source and each of the three terminals of the three-phase load; and

a switch control portion that performs conductance of the switch between the positive and negative poles of the first DC power source when the voltage command from said voltage command generating portion is lower than the electric potential output by the second DC power source and performs conductance of the switch between the positive and negative poles of the second DC power source when the voltage command from the voltage command portion is higher than the electric potential output by the second DC power source.

14. A power converter of claim13, wherein the switch control portion is provided with two carriers comprising a lower carrier and an upper carrier, wherein conductance of the switch between the positive and negative poles of said first DC power source is performed by comparing the voltage command value and the lower carrier, and conductance of the switch between the positive and negative poles of said second DC power source is performed by comparing the voltage command value and the upper carrier.

15. A power converter of claim 14, wherein a lower limit of the lower carrier is set to the electric potential of the first DC power source's negative pole , a upper limit of the lower carrier and a lower limit of the upper carrier are set to the electric potential of the pole formed by connecting the positive pole of the first DC power source with the negative pole of the second DC power source, and a upper limit of the upper carrier is set to the electric potential of the second DC power source's positive pole.

16. A power converter of claim 14, wherein the lower carrier and the upper carrier are triangular waves.

17. A power converter of claim 13, wherein each of the second and the third plurality of semiconductor switches comprise switch pairs for controlling bi-directional conductance.

18 A power converter of claim 13, and further comprising

a power distribution command generating portion that generates a power distribution command based on the power distribution commands for the first and second DC power sources, wherein a command that is obtained by adding the power distribution command and the voltage command is applied to the switch control portion.